

REMARKS

Reconsideration and allowance of claims 1 through 3, 5 through 7, 9 through 11, and 13 through 15, "rejected under 35 U.S.C. 102(e) as being anticipated by Schwuttke et al., U.S. 6,222,547," are respectfully requested.

Applicants' invention is distinctly different from the '547 reference. The claims that have been amended above and the claims that have not been amended make clear this difference.

The '547 reference relates to a three dimensional picture of a space. The system of the '547 reference is a "situation visualizer" that can function in one - (linear), two - (area), or three - (volume) dimensions. This situation visualizer draws the attention of the eye of the user to some activity of interest at one or more various points within the three dimensional picture of the space.

Applicants' invention relates to the mathematical representation of a problem. Applicants' invention, in clear contrast to the '547 reference, deals with the visualization of the mathematical representation, in grid or matrix form, and not in cyberspace, of a mathematical expression. One reading the description of Applicants' invention, particularly one skilled in the art, readily understands the nature of Applicants' invention. For example, the introduction to the example of Applicants' invention starting on page 12 reads "Matrices are useful constructs both in theoretical and applied mathematical analysis."

This difference between Applicants' invention and the '547 reference is indicated by the inclusion of at least one element, feature or detail in the rejected claims that is not found in the '547 reference.

Claims 1, 2, 5, 6, 9, 13, and 14 each call for

generating a grid based on a plurality of data values

The grid in the '547 reference is the result of an arbitrary division of cyberspace into smaller spaces. This division into smaller spaces is not based on a plurality of data values, although data values are subsequently located within the grid.

In contrast, in Applicants' invention, as defined by claims 1, 2, 5, 6, 9, 13 and 14, the grid is generated as a direct result of data values, rather than data values being located in the grid subsequent to formation, in an arbitrary manner, of the grid as in the '547 reference. Consequently, Applicants' invention, as defined by claim 1, 2, 5, 6, 9, 13, and 14 is different from the '547 reference and this difference is meaningful in that it highlights the different purpose and use between Applicants' invention and the system in the '547 reference.

Claims 3, 7, 11, and 15 each call for

extracting a plurality of data values associated with a mathematical matrix to generate a geometric representation

The comments advanced above in connection with claims 1, 2, 5, 6, 9, 13 and 14 apply to the rejections of claims 3, 7, 11 and 15. Applicants' invention, as defined by claims 3 and 7, differs from the '547 reference by the mathematical matrix in Applicants' invention being generated as a direct result of data values, rather than data values being located in a matrix subsequent to formation, in an arbitrary manner, of the matrix as in the '547 reference. Consequently, Applicants' invention, as defined by claims 3, 7, 11 and 15, is different from the '547 reference and this difference is meaningful in that it highlights the different purpose and use between Applicants' invention and the system in the '547 reference.

Reconsideration and allowance of claims 4, 8, 12, and 16, "rejected under 35 U.S.C. 103(a) as being unpatentable over Schwuttke et al., U.S. 6,222,547," are respectfully requested. Claim 4 is dependent on claim 3, claim 8 is dependent on claim 7, claim 12 is dependent on claim 11, claim 16 is dependent on claim 15. Consequently, claims 4, 8, 12, and 16

are patentable over the '547 reference for the same reasons advanced above in connection with claims 3, 7, 11 and 15.

In view of the foregoing amendments and remarks, this application is in condition for allowance which action is respectfully requested.

Respectfully submitted,

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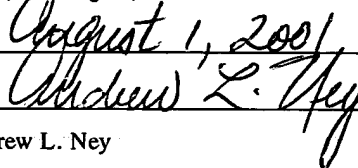
Attachment: Version with Markings to Show Changes Made

Dated: August 1, 2001

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

1 3. (Twice Amended) A method for visualizing data
2 ~~provided in the form of a geometric representation, said method comprising~~
3 the steps of:

4 extracting a plurality of data values associated with a
5 mathematical matrix ~~from~~ to generate the geometric representation;

6 generating a graphic representation of the plurality of data
7 values; and

8 displaying the graphic representation to a user.

1 7. (Twice Amended) An article of manufacture comprising
2 a computer usable medium having computer readable program code means
3 embodied therein for visualizing data provided in the form of a geometric
4 representation, the computer readable program code means in said article of
5 manufacture comprising computer readable program code means for causing
6 a computer to effect:

7 extracting a plurality of data values associated with a
8 mathematical matrix ~~from~~ to generate the geometric representation;

9 generating a graphic representation of the plurality of data
10 values; and

11 displaying the graphic representation to a user.

1 11. (Twice Amended) A computer program product
2 comprising a computer usable medium having computer readable program
3 code means embodied therein for causing visualization of data provided in
4 the form of a geometric representation, the computer readable program code

5 means in said computer program product comprising computer readable
6 program code means for causing a computer to effect:

7 extracting a plurality of data values associated with a
8 mathematical matrix ~~from~~ to generate the geometric representation;

-9 generating a graphic representation of the plurality of data
10 values; and

11 displaying the graphic representation to a user.

1 15. (Twice Amended) A storage device readable by a
2 computation machine, tangibly embodying a program of instructions
3 executable by the machine to perform a method for visualizing data provided
4 in the form of a geometric representation, said method comprising the steps
5 of:

6 extracting a plurality of data values associated with a
7 mathematical matrix ~~from~~ to generate the geometric representation;

8 generating a graphic representation of the plurality of data
9 values; and

10 displaying the graphic representation to a user.